

CURRENT LITERATURE.

Field, Forest and Garden Botany.¹

Of all the books which Dr. Gray found time in his busy life to prepare, none has been so widely used in schools as the manual which included the common cultivated plants. Although the first edition appeared in 1868, at the time of his death he was only hoping to find time to revise it. Shortly after his death, provisional arrangements were made by Dr. Watson for its revision, which was begun by Professor Barnes. A change in his plans, and a growing conviction that he could not do the work satisfactorily under the limitations imposed, impelled him to ask after Dr. Watson's death for release from the agreement. At that time a preliminary list of the species to be included had been made, and also the first draft of the manuscript through the Leguminosæ. The corporation of Harvard College then placed the prosecution of the work in the most competent hands of Professor Bailey, to whom therefore belongs the credit for the whole revision.

The book appeared early in the present year. It is really much more than a revision, since it now includes eighty-two genera and 553 species more than the original. This increase is partly due to extension of territory west to the 100th meridian and more largely to the great increase in the number of plants now in common cultivation. In plan, arrangement, and style of description, as well as nomenclature, the book is still Dr. Gray's; the reviser's aim being to bring it down to date. The only noteworthy innovation is the placing of the gymnosperms after the angiosperms, instead of between the dicotyledons and monocotyledons, a change to which Dr. Watson's reluctant consent was obtained.

The most difficult part of the work of revision naturally is to determine what to leave out. Prof. Bailey has been happy in the omissions he has made as well as in the choice of species to be included. In fact throughout the revision his wide knowledge of cultivated and wild plants is apparent.

If any criticism is to be made upon the book it is that Prof. Bailey has not revised it enough. Dr. Gray always considered it the most

¹ GRAY, ASA:—Field, forest, and garden botany, a simple introduction to the common plants of the United States east of the 100th meridian, both wild and cultivated; revised and extended by L. H. Bailey. 8vo. pp. 519. American Book Co. 1895.

crude of his books because it was made in an incredibly short time; it would have been wise therefore for the reviser to give more attention to unifying its descriptions and because of their brevity to make sure that contrasted characters were used in related species as well as in section characters. In both these points the original was conspicuously defective and the revision therein is not materially better, as will be evident to any one by even casual comparison. Considerable space might have been saved also in remarks under each genus by condensing the explanation of the name. It may be objected that these changes would have made the book mechanical and have eliminated the peculiar happy touches characteristic of Dr. Gray. Yet they are just such changes as Dr. Gray would probably have made himself; and in a manual one expects formality.

In typography a marked improvement has been made in indicating indigenous and exotic species and horticultural forms by special type. Though having the same sized "body" as the first edition the type of the new book has a larger and clearer face and makes a fair page. It is quite certain that the revision and extension of this book will insure for it a new lease of life and a still wider use. We wish the Herbarium whose property it is a large income from its sale.

Minor Notices.

THE SECOND EDITION of Spalding's "Introduction to Botany"¹ has recently been issued. It has been improved by the addition of a chapter on fungi, and a glossary and index. There have been some minor changes made here and there, but the arrangement and mode of treatment have not been altered. We can recommend this edition even more heartily than we did the first. It contains too much work for the ordinary high school, but the teacher who can not from it select a suitable course, or who finds it "too advanced" for his class may well question his fitness to teach botany as it ought to be taught in a high school laboratory.

THE "BUSHBERG CATALOGUE" is by no means merely a trade catalogue, but is widely and most favorably known as a comprehensive and reliable manual of grape culture. So important is it, particularly in its descriptive list of varieties that earlier editions were translated into French, Italian, German and several other languages. The fourth

¹SPALDING, V. M.—Guide to the study of common plants, an introduction to botany. Ed. 2. 12 mo. pp. xxiii + 294. Boston, D. C. Heath & Co. 1895.

edition has now been issued,¹ twenty-five years after the publication of first. Although the third edition, issued eleven years ago, was soon exhausted the publication of this has been delayed until the perfecting of the remedies for grape diseases has given renewed confidence in the success of grape growing. The firm of Bush & Son & Meissner have had the cooperation in preparing this work of various gentlemen. B. T. Galloway, contributed the article on fungous diseases and their treatment; T. V. Munson, whose studies of the grape have extended over fifteen years, furnishes a classification of the grapes, though the article by Dr. Geo. Engelmann in previous editions has been continued; C. V. Riley has revised the article on insects. The descriptive list of varieties occupies over 100 pages, and by its typography shows the rank of each. The pamphlet is profusely illustrated.

THE DRUG DAMIANA is treated in its botanical features by John S. Wright, with illustrations, in *Lilly's Bulletin* No. 25. It is composed of the dried leaves, young shoots, and occasional flowers and pods of *Turnera diffusa aphrodisiaca*, a suffrutescent plant of western Mexico, also reported from Texas. *Aplopappus discoideus* has sometimes been substituted for it. The drug has been known in this country for only about twenty years, but on account of strong tonic character has gained favor rapidly among physicians.

THE LABORATORIES of Natural History of the State University of Iowa have devoted the first part of volume 3 of their *Bulletin* to the narrative of the Bahama expedition sent out by the institution in 1893. The number contains 250 pages and many plates.

FOUR STATION BULLETINS upon weeds are as follows: The Russian thistle in Ohio, with poster supplement, by A. D. Selby (Ohio, no. 55), general account, and a copy of the state weed laws: Five farmers' foes by Moses Craig (Ore., no. 32), brief account of *Cnicus arvensis*, *C. lanceolatus*, *Sonchus arvensis*, *Xanthium spinosum* and *Salsola Kali tragus*, with copy of state weed laws; New Mexico weeds, I, by E. O. Wooton (N. M., no. 13), some account of weeds and their treatment, with descriptions of eighteen of the worst kinds, finely illustrated from photographs; Distribution of weed seeds by winter winds, also effect of seed exchange upon the culture of wheat by H. L. Bolley (N. D., no. 17), observations on the number of seeds in snow drifts and the action of winds in carrying free seeds.

¹BUSH & SON & MEISSNER:—Illustrated descriptive catalogue of American grape vines; a grape growers' manual, 4th ed. 8vo. pp. 198. The authors, Bushberg, Mo. 1895. Fifty cents.